CHAPTER 5: PROCEDURES APPLICABLE TO FOREIGN FREIGHT VESSELS

A. GENERAL PROVISIONS

Under Coast Guard policy set forth in the "M" Business Plan (COMDTINST 16000.26) each foreign freight vessel shall be examined in accordance with the Targeting Procedures outlined in MSM II-D4.

B. COMPLIANCE WITH U.S. REGULATIONS

In addition to the Pollution Prevention Regulations (33 Code of Federal Regulations (CFR) parts 151, 155-157, 159) and the Navigation Safety Regulations (33 CFR part 164) foreign vessels are subject to the requirements of the Hazardous Materials Transportation Act (HMTA) (49 U.S.C. 1802 et seq.) when in U.S. waters. The applicable regulations are found in 46 CFR Part 150 and 49 CFR Parts 107, 171-179.

1. Oil-Bulk-Ore (OBO) Vessel Change of Status; Conversion to a Non-Tank Vessel

The definition of "tank vessel" in 46 U.S.C. 2101(39) includes all vessels which are constructed or adapted to carry, or that carries, oil or hazardous material in bulk as cargo or cargo residue. Therefore, any vessel, including an Oil-Bulk-Ore (OBO) vessel, which is constructed or adapted to carry oil or hazardous materials in bulk as cargo, is considered a tank vessel even if it does not carry oil or hazardous material when trading in the U.S. For business reasons, owners of these types of vessels may wish to remove the vessel from tank vessel status.

Vessel Change of Status

a. Vessel Change of Status. Following the decision to remove a vessel from the bulk oil or hazardous material trade, the vessel's owner should:

(1) Request from its classification society or flag state that its International Oil Pollution Prevention Certificate (IOPP), along with the Form A Supplement, be reissued to indicate that the vessel does not carry oil in bulk as cargo.

(2) Apply to the Coast Guard National Pollution Funds Center (NPFC) if the owner desires to have the Certificate of Financial Responsibility (COFR) revised to reflect non-tank vessel status.

Enforcement Action

b. Enforcement Action. During annual examinations and reexaminations, the boarding team shall verify that the vessel's documents all properly indicate the "non-tank vessel" status. They shall update the Marine Safety System (MSIS) Vessel File List of Documents (VFLD) for the vessel to indicate the change in status from a tank vessel to non-tank vessel.

(1) If a vessel's certificates indicate "non-tank vessel" status, but cargo oil or hazardous materials are found to be carried in bulk on board, the vessel will not be allowed to transfer cargo oil. The vessel is in violation of its IOPP Certificate and shall be detained until enforcement actions are completed as provided in Volume I, Chapter 4.I.1.e. of this manual. Additionally, enforcement actions shall be initiated pursuant to a COFR violation as provided in Volume I, Chapter 4.I.1.d. of this manual.

C. CONDUCTING FREIGHT VESSEL EXAMINATIONS

1. Scheduling

The arrival of most freight vessels can be anticipated by the advance notice of arrival provided under 33 Code of Federal Regulations (CFR) 160.201. Arrivals of other freight vessels may be discovered during harbor patrols, or from information provided by Vessel Traffic Services, local pilots, or local agencies such as the Maritime Administration or Port Authority. Using the targeting procedures described in Chapter D4 of this volume, Officers in Charge Marine Inspection (OCMI) or Captains of the Port (COTP) shall identify high priority vessels entering their zones. After identifying those vessels to be boarded, the examinations will be scheduled using the Marine Information System (MSIS) Port Safety Vessel Scheduler (PSVS) product set and a boarding team will be assigned. Boarding teams assigned to conduct Priority I boardings shall include a marine inspector. Other boarding teams should include a marine inspector if resources permit. Teams should also be scheduled to monitor cargo transfers if vessel operations permit.

2. Coordination With The National Cargo Bureau

Determine if the NCB intends to board the vessel during the port call. NCB activity is limited to cargo requirements and does not address the non-cargo vessel requirements (i.e., SOLAS, MARPOL, STCW, ILO, navigation safety and pollution prevention). When the NCB is boarding the vessel, consideration should be given to concentrating Coast Guard efforts on those areas not addressed by the NCB and relying on the NCB report to ascertain the vessel's compliance with applicable cargo requirements.

3. Pre-Boarding Preparations

Prior to arrival at the vessel, the boarding team must review the available MSIS data and regulations to determine the required examination activities for the boarding. Extract the basic information from the MSIS Port Safety Vessel History (PSVH) for use during the boarding (including: name, flag, call sign, tonnage, date/port of last Coast Guard boarding, recent spills, outstanding discrepancies, status of certificates and documents, etc.). Classification society information should be checked in the Vessel File Involved Party (VFIP) product set. A check of the MSIS history of the vessel may indicate that certain information must be confirmed or updated during the boarding to keep MSIS records current. It may also indicate outstanding discrepancies that you should check. Since 49 CFR 107 and 171 do not require a carrier's registration to be on board, it will not always be possible to check for that during a boarding. However, if registration or lack thereof is verified prior to the boarding, appropriate action can be taken at the time of the boarding if packaged hazardous material is being carried by the vessel.

4. Approaching The Vessel As you approach the vessel, look for the following:

a. Cargo transfer operations;

b. Placards and labels attached to cargo being loaded or waiting to be loaded (noting nature of cargo involved);

c. Evidence of cargo leaks or pollution dockside, around palletized or containerized cargo, and around the vessel;

d. Warning signs and signals;

e. The general condition of the facility (or other vessel) adjacent to the vessel being boarded;

f. The general condition of the vessel;

g. The location of the vessel's load line (if the vessel is trim and the load line mark is submerged, the COTP should be notified);

h. The vessel's draft readings;

i. Suitability of the moorings and the gangway; and

j. General evidence of unsafe practices or conditions.

5. Boarding the Vessel Upon boarding the vessel, identify yourself as a representative of the U.S. Coast Guard, Marine Safety Office or Marine Safety Activity as appropriate, and ask to see the master or chief mate (or the senior deck officer on duty). Introduce yourself and advise that the purpose of this visit is to conduct a Port State Control Examination.

a. When conducting an annual examination, advise the master that the examination will consist of a document check, a general examination, operational testing of specific equipment (i.e. steering, firemain, and navigation equipment as a minimum) and emergency drills. If applicable, it may also include a follow-up on any outstanding discrepancies.

b. When conducting a reexamination, advise the master that the examination will consist of a document check and a general examination as a minimum. If applicable, it may also include a follow-up on any outstanding discrepancies.

In either event, ensure that the master understands that the boarding team reserves the right to expand the examination if "clear grounds" are established to doubt the validity of the vessel's certificates (See MSM II-D1.I). The depth and scope of the examination must be determined by the boarding team based on their observations. A satisfactory check may be accomplished simply by sighting a piece of equipment in some cases, while in others it may be necessary to look, question or test more closely.

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6. Examination of Documents Sight and review pertinent vessel documents, certificates, and officers' licenses. Make sure they are current. Determine whether the vessel's hull, deck, internal structure, cargo hatches, piping or required equipment has been damaged or undergone repair since the last Coast Guard examination. Also determine whether any outstanding conditions of class exist. Check to see if the vessel is overdue for dry-docking or repair. If after boarding it is determined from records aboard a vessel that the vessel is not due for an examination, or that the vessel's boarding priority is lower than MSIS records indicate, advise the vessel's officer that you will limit your examination to a less extensive reexamination. Do not leave the vessel without at least completing a cursory document check and a general "walk through" examination to ensure no obvious deficiencies exist.

The document check should include the following as appropriate:	
❑ Certificate of Registry	❑ Oil Transfer Procedures
❑ Classification Society Certificate	❑ Dangerous Cargo Manifest
❑ SOLAS Safety Construction Certificate	❑ Stowage Plan
❑ SOLAS Safety Equipment Certificate	❑ Hazardous Materials Training Records
❑ SOLAS Safety Radiotelegraphy Certificate	❑ Pollution Prevention Compliance Letter
❑ SOLAS Safety Radiotelephone Certificate	❑ ISM Certificates
❑ Load Line Certificate	❑ Shipboard Oil Pollution Emergency Plan
❑ Tonnage Certificate	❑ Cargo Securing Manual
❑ Certificate of Financial Responsibility	❑ Garbage Management Plan
❑ Safe Manning Document	❑ Oil Record Book
❑ International Oil Pollution Prevention Certificate or equivalent	

IOPP Certificate

a. IOPP Certificate. Review the International Oil Pollution Prevention (IOPP) Certificate. Ensure that for countries which are not signatory to the International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 (MARPOL 73/78), the equivalent documentation is Coast Guard acceptable. Check the Oil Record Book to ensure that it has been maintained properly. Navigation Vessel Inspection Circulars (NVIC) 8-83 and 6-94 (CH-1) provide additional guidance for MARPOL 73/78 enforcement.

Safe Manning Document

b. Safe Manning Document. SOLAS, Chapter V, Regulation 13, requires all ships of 500 gross tons and more on international voyages to be issued a safe manning document. This document states what the flag State considers to be the minimum complement necessary to ensure the vessel is sufficiently manned from the point of view of safety. There is no standard format for a safe manning document, though some guidance on the elements to be included in the document can be found in IMO Resolution A.481(XII), Annex 1, and guidance to be taken into account in determining safe manning can be found in Annex 2 of that IMO resolution. However, there are no specific manning scales which can be considered as an internationally agreed standard for assessing the adequacy of the crew complement on a seagoing ship. Therefore, the boarding team must use good judgment in questioning a flag State's determination of the adequacy of a vessel's manning level.

(1) Every foreign flag vessel of 500 gross tons or more visiting a U.S. port should have on board a safe manning document issued by the vessel's flag State. If the document is in a foreign language, an English translation is to be available. The document should contain the following information:

(a) Identification of the ship;

(b) A table showing the numbers and grades of personnel required to be carried, together with any special conditions or limitations based on the particulars of the ship or the nature of the service upon which it is engaged; and

(c) The date of issue and expiration along with a signature for and the seal of the Administration.

(2) In the event a safe manning document is available, the flag State is a party to SOLAS, the information in the document is complete, and the required crew complement is consistent with normal expectations for a ship of its size and service, no further action is required with respect to the manning document itself. Attention may then be directed to determining that the crew is appropriately certificated under the STCW convention (as discussed below).

International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 as amended in 1995 (STCW 95)

c. International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978 as amended in 1995 (STCW 95). During all foreign vessel examinations, boarding officers shall compare the crew certificates with the requirements of the vessel's Safe Manning Document, check posted watch arrangements for appropriate rest periods, and examine the specific new crewmember familiarization procedures. The 1995 STCW amendments made many significant changes to the Convention, and are discussed in detail in NVIC 3-98. Refer to NVIC 3-98 for a summary of changes, a discussion of clear grounds to expand a general examination, and deficiencies that may be deemed to pose a danger to persons, property, or the environment. The following guidance is to be followed when non-STCW 95 Certificates are encountered:

Non-Party Flag States

(1) Flag States not party to STCW 78 or 95: Confirm that the flag State is not party to the Convention. If not, follow the guidance in Chapter D2 E.3.a of this volume.

STCW Flag States

(2) Flag States where STCW entered into force less than five years from vessel boarding: Transitional provisions of the Convention will allow flag States to continue to issue Certificates under the terms of the previous Convention for five years. States may continue to issue STCW 78 Certificates until February 1, 2002, to all mariners who commence training or seagoing service before August 1, 1998.

Hazardous Material Training

d. Hazardous Material Training. Title 49 CFR 176.13 requires records to be maintained aboard the vessel of the hazardous materials training required by 49 CFR part 172. A check should be made for documentation that personnel have received appropriate training.

Dangerous Cargo Manifest Check

e. Dangerous Cargo Manifest Check. Ask if the vessel is (or will be) carrying any packaged hazardous materials. If it is, ask to see the vessel's dangerous cargo manifest (DCM). Check the DCM to ensure completeness. Also note the nature and stowage locations of the various hazardous materials from the DCM and list a few specific hazardous material shipments on board. Also examine the planned stowage of hazardous cargo to determine if the general handling, stowage, and segregation requirements are met. Verify the following items on the DCM:

(1) Vessel's name, flag, official number, and/or call sign are listed;

(2) General cargo is not listed;

(3) Proper shipping names and identification numbers are listed (no improper use of dittos or abbreviations for proper shipping name);

(4) Proper hazard classifications are entered without dittos or abbreviations;

(5) The number and description of packages and their gross weights are properly entered;

(6) Any additional description required by 49 CFR 172.203 (i.e., Limited Quantity, Poison, Reportable Quantity, etc.) is listed;

(7) The stowage location for each hazardous cargo is accurately indicated;

(8) Emergency response telephone number is listed for each cargo listed;

(9) It is signed and dated by the preparer; and

(10) It is signed by the master or licensed deck officer.

Garbage Management Plan (GMP)

f. Garbage Management Plan (GMP). These plans should be examined during annual and reexams. These are written procedures for collecting, storing, processing, and disposing of garbage, including the use of equipment on board. It should designate the person responsible for carrying out the plan and should be in the working language of the crew. The Plan was made mandatory by an amendment to MARPOL 73/78 which added regulation 9 to Annex V. It is important because it requires ship operators to track their garbage and take notice of what happens to it. Missing GMP's are not sufficient grounds, in and of themselves, for a detention.

Global Maritime Distress and Safety System (GMDSS)

g. Global Maritime Distress and Safety System (GMDSS). There are exceptions, but GMDSS equipment is required on all cargo ships of 300 gross tons and over as of 1 February 1999. During general examinations, briefly examine the GMDSS equipment as required by SOLAS IV, with further guidance described in NVIC 3-99. An expanded exam program is being developed that will focus on STCW GMDSS operators, when clear grounds are established that radio operators pose a danger to the environment because of repeated false alert transmissions. The method to identify these targeted vessels, training requirements, and personnel resources available to augment MSO boarding teams to perform these limited competency assessments are still being developed. Until this program is implemented, boarding officers are not expected to perform expanded STCW GMDSS operator competency assessments.

7. General Examination

During annual examinations and reexaminations, conduct a general "walk through" examination of the vessel. The general examination should include observation of required equipment on deck, in the engine room, and in after steering. Verify the adequacy, maintenance, and operation of firefighting, pollution prevention, and other equipment required by regulations. Look for obvious safety problems. Verify that the stowage location for hazardous cargoes is accurately indicated.

Navigation Safety Equipment Check

a. Navigation Safety Equipment Check. During annual examinations and reexaminations, determine through operator competence (STCW) if all equipment was working properly during the last voyage. If equipment is not working, determine when repairs will be made. If a major piece of electronic equipment (like the radar or Automatic Radar Plotting Aid (ARPA)) is not operational, the OCMI/COTP should be contacted for instructions.

During annual examinations conduct a thorough check of the bridge and navigation spaces for compliance with the Navigation Safety Regulations (33 CFR 164). Ask to have the electronic equipment energized if cargo operations permit.

SAFETY NOTE: Energizing Equipment During Cargo Operations Could Pose A Safety Hazard.

Check the complete list of navigation safety items, paying special attention to the extra requirements for vessels over 10,000 gross tons. Check or test the equipment paying particular attention to the following:

Position Fixing Device

(1) Position Fixing Device (LORAN C, Satellite Navigation System (SATNAV) or GPS). Energize the equipment. Check that the receiver is able to lock on and track the signals for these readings. For SATNAV, see that the mate is able to set up the receiver to obtain the vessel's position on the next usable satellite pass.

Automatic Radar Plotting Aid (ARPA)

(2) Automatic Radar Plotting Aid (ARPA). Ensure that each vessel over 10,000 gross tons is equipped with an ARPA as required by the Port and Tanker Safety Act and the Navigation Safety Regulations. Take the time to spot targets on the screen and to follow a vessel's movement across the screen.

Echo Depth Sounder and Recorder

(3) Echo Depth Sounder and Recorder. Energize the equipment to see if it gives a reading. The recorder will show recent performance if it was operational as the vessel entered the harbor.

Marine Radar

(4) Marine Radar. Energize the radar and note targets moving across the screen or pick out shore objects on the radar if possible. Check both radars on vessels over 10,000 gross tons, including true north stabilization features.

Vessel FM Radio

(5) Vessel FM Radio. Ensure that the vessel has the capability to use VHF Channels 13, 16 and 22 and that the radios are in working order. A radio check is not necessary unless you suspect that the radios do not work.

Magnetic Steering Compass

(6) Magnetic Steering Compass. Check to see if there is a current deviation table posted near the magnetic compass. The table should be derived from swinging the vessel and there should be a comparison log showing entries of the differences between the vessel's true, gyro and magnetic north compass readings. The magnetic compass can vary depending on the type of cargo loaded and it may show differences from voyage to voyage. Check the emergency steering compass periscope, if fitted, to ensure that you can see the card. Check compass illumination.

Gyrocompass

(7) Gyrocompass. Check the reading on the steering gyrocompass against the repeaters on the bridge wings, the second steering station and the steering engine room. Be sure to ask if the gyro is energized as they are sometimes secured during an extended port stay. Look at the comparison log for any fluctuations between the gyro, magnetic and true readings.

Rudder Angle Indicator

(8) Rudder Angle Indicator. Check the rudder angle indicator in all locations such as main steering station, bridge wings, and emergency steering station. They should all have the same reading. A few degrees variance is acceptable.

Charts

(9) Charts. Check charts of the areas to be transited within the COTP zone to see if they are maintained up-to-date. Use a list of the most recent Defense Mapping Agency (DMA) notice to mariners changes to verify that a chart is corrected up-to-date. Foreign charts are acceptable if they contain similar information and are of a large enough scale to permit safe navigation. NVIC 9-83 provides additional guidance regarding application of the requirements for carriage of charts. Electronic charts are not an acceptable substitute for paper charts.

Publications

(10) Publications. Vessels must carry a currently corrected copy of, or applicable currently corrected extract from, the U.S. navigation publications (or foreign equivalents) listed in 33 CFR 164.33. Further enforcement guidance is provided in NVIC 9-83. Publications required include:

(a) U.S. Coast Pilot.

(b) Coast Guard Light List.

(c) Tide Tables.

(d) Tidal Current Tables or River Current Publication.

Relative Motion Plotting Equipment

(11) Relative Motion Plotting Equipment. While the ARPA may do some of the relative motion plotting for the vessel personnel, the vessel still must have equipment for manual plotting of relative motion. Normally this equipment consists of maneuvering boards, triangles, parallel rules, etc.

During reexaminations, conduct a brief check of the bridge and navigation spaces for compliance with selected items from the Navigation Safety Regulations (33 CFR 164). Do not check the entire list of navigation safety requirements or conduct operational testing of the equipment unless "clear grounds" exist to doubt the vessel's compliance with the navigation safety regulations. Normally, a check of three or four of the items listed above is sufficient.

ILO 147

b. ILO 147. During annual examinations and reexaminations, be alert for especially hazardous or unsanitary conditions. We cannot hold other countries to the same standards we expect here in the U.S. However, we should be alert to those conditions that are blatantly unsafe. Labor or pay complaints should be brought to the attention of the Department of Labor by contacting G-MOC. Where intervention authority is lacking, local humanitarian or religious organizations (i.e. Seamen's Friends Society) may be able to assist in correcting unsanitary practices or in assisting crewmembers. See COMDINST 16711.12 for further guidance.

Structural Integrity

c. Structural Integrity. During annual examinations and reexaminations, look for evidence of long term neglect, wastage, corrosion, cracking, pitting or casualty damage. The presence on deck of plating, sections of piping, or an excessive number of oxyacetylene tanks may indicate unauthorized repairs or other problems. Look for recent burn marks from welding particularly on the reverse slope plates of the upper wing tanks if possible. Temporary repairs including cement boxes, epoxy patches, postage stamp inserts and drill stopped cracks may indicate problems. Each situation must be evaluated to determine whether the temporary repair is adequate or whether the vessel should be detained until permanent repairs are made.

Cargo Operations

d. Cargo Operations. During annual examinations and reexaminations, check the following:

General

(1) General.

(a) Check containers and packaged cargo for proper marking, labeling, and placarding;

(b) Look for damaged or leaking cargo containers and packages, particularly forklift punctures or crushing that would indicate dropped packages;

(c) Look for potential ignition sources, particularly from electrical equipment, smoking violations, stowage plan and cargo segregation;

(d) Determine if the vessel has a capacity to retain all oily waste and oily bilge slops generated while operating in U.S. waters; and

(e) Check to see that no oil or hazardous material is carried in prohibited spaces.

(f) As of December 31, 1997 Administration approved Cargo Securing Manuals (CSM's) became mandatory under SOLAS 74, Ch. VI/5 and VII/6 for all cargo vessels engaged in international trade which are equipped with cargo securing systems or individual cargo securing arrangements. Checks of foreign flag cargo vessels for CSM's, approved by the appropriate flag Administration or by organizations designated by the flag Administration, shall become a routine part of port State control examinations. NVIC 10-97 provides more amplifying information on CSM's.

Foreign flag cargo vessels found to not have an Administration approved CSM will be required to provide a CSM prior to the next U.S. voyage. For vessels with dangerous goods/hazardous materials cargoes already aboard, CG PSCO's will evaluate the vessels securing arrangements for the dangerous goods/hazardous materials cargoes. In cases where the dangerous goods/hazardous materials cargo securing is found insufficient, appropriate corrective action will be required as a condition for departure.

For foreign flag vessels that return to U.S. ports without CSM's on subsequent voyages, more restrictive actions may be necessary, to include:

(i) Detention of the vessel until the vessel's owner or operator formally establishes a reasonable timeline for submittal of a CSM to the cognizant Administration or authorized representative,

(ii) Notification of the cognizant Administration and classification society that the vessel is in violation of SOLAS 74, Ch. VI/5 and VII/6, and

(iii) Prevention of future cargo operations at all U.S. ports until the vessel owner or operator provides proof of compliance with SOLAS 74, Ch. VI/5 and VII/6 CSM requirements.

On Deck

(2) On Deck.

(a) Note the general condition of the fuel piping systems (including manifolds), particularly any non-permanent repairs and other irregularities;

(b) Check the materiel condition of the fuel vents; (note: there is no requirement for fuel tank vent screens on foreign vessels)

(c) Examine closure mechanisms for cargo hatches, sideports, watertight doors and other openings that maintain the seaworthy condition of the vessel; and

(d) Ensure that stowage and securing arrangements for on deck containers are adequate and that cargo segregation is in compliance with 49 CFR 176.83.

Lifesaving Equipment Check

e. Lifesaving Equipment Check. During annual examinations and reexaminations, spot-check the vessel's lifesaving equipment. Observe the condition of the lifeboats paying particular attention to the hull and davits. Liferaft stowage and missing weak links are common problems that can usually be corrected quickly without detaining the vessel. See D5.C.7.h. for guidance on abandon ship drills.

Firefighting Equipment Check

f. Firefighting Equipment Check. During annual examinations and reexaminations, review the vessel's fire control plan and note the adequacy and condition of firefighting equipment. Check the fire stations to ensure that there are hoses, extinguishers, fixed CO2 systems, and other firefighting equipment on the vessel as indicated in the fire control plan and/or general arrangement plan. Examine the fire detection and sprinkler systems if applicable. During annual examinations, test the fire main and pumps by charging the system and witnessing the pressure at widely separated deck stations simultaneously. Do not spend the time to look at every station, but ensure the vessel's readiness to respond to a fire. Determine if international shore connections are provided where required.

Pollution Prevention Equipment Check

g. Pollution Prevention Equipment Check. During annual examinations and reexaminations, check for compliance with the Pollution Prevention Regulations (33 CFR 155, 156 and 159) and MARPOL Regulations (Annexes I, II and V) [See 33 CFR 151 and COMDTINST M16450.30 for further guidance]. During annual examinations, this should be an in-depth look at the vessel pollution prevention requirements including examination of fuel and lubricating oil systems, waste oil handling systems, oil or liquid hazardous material transfer procedures (as applicable), garbage handling procedures, declarations of inspection, and marine sanitation devices. At a minimum, the following should be examined:

NOTE: These items applicable only to vessels carrying oil or liquid hazardous material as cargo (i.e., in deep tanks) or engaged in bunkering.

On Deck

(1) On Deck.

(a) Look at the small discharge containment and visually check the capacity. Have someone demonstrate the mechanical means of closing scuppers and drains in the containment, and look for the means of draining or removing discharged product from the containment;

(b) Look at the fuel and bulk lubricating oil discharge containment and visually check the capacity (i.e., 1/2 barrel 300-1600 gross tons, 1 barrel over 1600 gross tons, 5 U.S. gallon portable container for 100-300 gross tons and 100 gross tons or over constructed before July 1974);

(c) Sight the bilge slops piping outlet (1,600 gross tons and above, on each side of the weather deck; below 1,600 gross tons, accessible from the weather deck) and make sure the vessel has a means to stop each discharge on the weather deck near the discharge outlet;

(d) Ensure vessel meets requirements for ballast discharge if it ballasts fuel tanks;

(e) Locate the emergency shutdown system and, if possible, have it activated to ensure proper operation;

(f) Check the vessel's required transfer communications (continuous two-way voice between persons-in-charge of the transfer operation) and ensure that they are intrinsically safe;

(g) Visually inspect required deck lighting at the transfer point and transfer operation work area;

(h) The minimum design burst pressure for each hose assembly must be at least four times the sum of the pressure of the relief valve setting (or four times the maximum pump pressure when no relief valve is installed) plus the static head pressure of the transfer system, at the point where the hose is installed.

The maximum allowable working pressure (MAWP) for each hose assembly must be more than the sum of the pressure of the relief valve setting (or the maximum pump pressure when no relief valve is installed) plus the static head pressure of the transfer system, at the point where the hose is installed.

(i) Check to see each hose is marked with the required information; and

(j) Sight the "Discharge of Plastic and Garbage Prohibited" placard.

Engine Room

(2) In Engine Room.

(a) Sight the oil-water separator and check the certification label for a Coast Guard approval number or International Maritime Organization (IMO) specification label (MARPOL 73/78);

(b) Check the bilge continuous monitor for an approval number or IMO specification label and sight the recording tape;

(c) Check and operationally test the discharge alarm system;

(d) Sight the "Discharge of Oil Prohibited" placard required to be in each machinery space, bilge, and ballast pump control station;

(e) Verify that the vessel is equipped with an operable, U.S. Coast Guard or MARPOL IV certified marine sanitation device (MSD); and

(f) Check the bilges for presence of oil or hazardous material.

(g) Confirm structural integrity of ER bilges.

In Cargo Control Area

(3) In Cargo Control Area.

(a) Verify that the vessel has a list of designated persons-in-charge for each type of transfer operation (fueling and each product).

(b) Examine in depth the bulk liquid transfer procedures. Ensure that:

- They are legibly printed in a language understood by personnel engaged in the transfer operations;
- They are permanently posted or available where they can easily be seen and used by crewmembers;
- There is a list of each oil or liquid hazardous material transferred (generic name, product information, applicability of transfer procedures);
- There is an accurate description of each transfer system on the vessel (including a line diagram, the location of the shutoff valves, description of and procedures for emptying the discharge containment system);
- The number of persons required to be on duty for transfer is indicated with the duties, by title, of each person required for each transfer operation;
- There are procedures and duty assignments for tending the vessels moorings during transfer;
- There are procedures for operating the emergency shutdown and transfer communications, topping off tanks, ensuring that all valves used during the transfer operation are closed on completion of the operation, and reporting fuel or cargo discharges;
- Any exemptions or alternatives granted are located in the front of the transfer procedures; and
- Any amendments have been incorporated.

(c) Confirm that the emergency shutdown is operable from the cargo control area for bulk liquid transfer operations.

Abandon Ship Drill

h. Abandon Ship Drill. An abandon ship drill is to be witnessed by the boarding team during annual examinations.

i. Conducting the drill: Muster crew at their stations. Check muster lists for accuracy. Check that lifejackets are properly donned. Determine if crew members are able to communicate with each other. Ensure that crewmembers are familiar with abandon ship procedures/duties and the proper use of ship's lifesaving equipment. Lower lifeboats, where practicable, to the embarkation deck. Conduct general examination of davits, falls, sheaves, etc. as boat is being prepared and lowered to the embarkation deck. Start lifeboat engines. Lowering of lifeboats into the water, releasing them and exercising the crew is **not** required. If the marine inspector or boarding officer feels the crew is unfamiliar with their duties or incapable of safely operating the lifesaving equipment, then the drill should be halted and the Master told to conduct training and/or additional exercises. The USCG should be recalled when they are ready to conduct a drill. During follow-up exam, inspectors/boarding officers may have crew lower boats into the water, release them and exercise crew, when practicable, to ensure competency of crew. Drills are determined unsatisfactory when language barriers interfere with adequate verbal communication, or when the competency of the crew is so inadequate that the drill can not be executed safely.

Fire Drill

i. Fire Drill. A fire drill is to be witnessed by the boarding team during annual examinations. The ability of the crew to respond to emergencies is witnessed during the drill. All crewmembers should participate except for those engaged in cargo operations or on watch in machinery spaces. One suggested method of conducting the fire drill is to choose a specific location in the vessel (cabin, paint locker, storage room, etc.) for a simulated fire.

Conducting the Drill

(1) Conducting the Drill. Have a crewmember go to the location and activate the manual fire alarm system. Observe the alarm indication on the fire alarm panel and the responses of the vessel's officers. A normal procedure is to send an officer or fire patrolman to investigate. Go to the location and describe the fire situation (smoke, flames, etc.) to the investigator. Observe how the report of fire is relayed to the bridge or damage control center. At this point most vessels will sound the crew alarm to summon the firefighting parties and the remainder of the crew to their stations. Observe the firefighting party arriving on scene, breaking out their equipment and fighting the simulated fire. Team leaders should be giving orders as appropriate to their crews and passing word back to the bridge or damage control center on the conditions. The firefighting crews should be observed for proper donning and use of their equipment. Make sure that all of the gear is compatible; e.g., the breathing apparatus can be worn with the protective suit, the helmet can be worn with the air mask, and the lifeline can be attached to breathing apparatus

or belt. Merely mustering the emergency crews with their gear is NOT acceptable.

Steering

j. Steering. Steering gear failures on all classes of foreign vessels have caused serious marine casualties and pollution incidents in U.S. waters. The steering system shall be tested at annual exams by a marine inspector. The tests should include the following:

(1) Operationally check the main and auxiliary steering from each remote steering gear control system and each steering position on the navigating bridge;

(2) Test the main steering gear from the emergency power supply;

(3) Check the reading on the bridge gyrocompass against the repeater in the after steering room;

(4) Check the rudder angle indicator in the after steering room, it should have the same reading as the indicator on the bridge;

(5) Test each remote steering gear control system power failure alarm and each steering gear power unit failure alarm;

(6) Test for full movement of the rudder according to the required capabilities of the steering gear;

(7) Test the means of communication between the navigating bridge and the steering gear compartment;

(8) Visually inspect the steering gear and its connecting linkage; and

(9) Check for indications of potential failures involving excessive leakage of hydraulic fluid; looseness in connections, fasteners, or couplings; frayed electrical wiring or evidence of arcing; unusual noises during operation; or evidence of insufficient maintenance. Examples of the latter include jury-rigged repairs, painted over lube fittings, and deficient maintenance that might adversely affect operation of the steering gear.

8. Expanded Examination

During any annual examination, reexamination, or deficiency follow-up, the boarding team should expand their examination of a vessel if their examination establishes "clear grounds" for believing that the condition of a vessel, its equipment, or crew do not correspond substantially with the particulars of the certificates. Expanded examinations should focus on those areas where "clear grounds" have been established and should not include other areas or systems unless the general impressions or observations of the boarding team support such examination.

D. MONITORS

Monitors should occur in conjunction with either an annual examination, reexamination or deficiency check whenever cargo, bunkering or lightering operations are occurring concurrently with the boarding. We should not board vessels for the purpose of conducting a monitor unless we also intend to conduct either an annual examination, reexamination or deficiency check. Generally the examination or reexamination should commence first with the examination of documents. However, if the transfer is in progress when you arrive, you may want to start with the monitor, particularly if the transfer is near completion.

1. Bulk Liquid Monitor

If a bulk liquid transfer is in progress, meet the person-in-charge and observe the cargo (or bunker) transfer operation (See MSM II-D6.D.1 of this volume).

2. Dry Cargo Monitor

Observe the transfer of hazardous materials and walk through the vessel to check for compliance with the packaged or solid bulk hazardous material handling requirements. When walking through the vessel, spot check for the hazardous materials noted during the DCM check. At a minimum, the following should be examined:

On Deck

a. On Deck.

(1) Observe the cargo handling equipment and procedures to ensure that cargo is properly secured and is not damaged during transfer;

(2) Ensure that only acceptable hazardous materials are loaded or carried on board;

(3) Check containers and packaged cargo for proper marking, labeling, and placarding;

(4) Look for damaged or leaking cargo containers and packages; and

(5) Look for smoking and hot work violations.

In Holds

b. In Holds. When possible, go into open holds. However, if the hatch is being worked, do not stop the loading operation unless you see or have reason to suspect a violation.

(1) Ensure that the hold is clean and dry;

(2) Check bilges for cargo residue;

(3) Check containers and packaged cargo for proper marking, labeling, and placarding;

(4) Look for damaged or leaking cargo containers and packages;

(5) Check for proper stowage and segregation of hazardous materials for compliance with 49 CFR 176.83;

(6) Note any inoperative or faulty cargo handling equipment; and

(7) Where flammable or combustible liquids are handled, ensure that electrical fixtures are explosion proof and only approved power operated industrial trucks are used.

E. CARGO SUPERVISION

Supervision of explosives or radioactive materials transfers follows the same general procedures as a freighter or container ship monitor with the following additional requirements:

1. Boarding Team Presence

The boarding team must be present during the entire transfer from beginning to end.

2. Special Requirements

Special requirements for the cargo carried must be enforced. For vessels carrying military and commercial explosives, 49 CFR 176, Subpart G, must be adhered to. Further guidance is contained in Chapter 29.E. of this volume. For vessels carrying highway route controlled quantities of radioactive material, 49 CFR 173, Subpart I, and 49 CFR 176, Subpart M, must be adhered to. Further guidance is contained in MSM II-F5.C.5. of this volume.

F. CLOSING THE BOARDING

Advise the master of all discrepancies noted, what corrective actions are required, and when those actions must be completed. The decision to impose operational controls should be made by the COTP except in cases of imminent danger. The boarding team should be prepared to make appropriate recommendations to the COTP regarding the actions to be taken on deficiencies. If the discrepancies make the vessel unsafe to proceed to sea, or an unreasonable risk to the environment, the COTP should detain the vessel under the provisions of the appropriate international convention, a COTP order, or a customs hold as appropriate. Discrepancies which do not make a vessel unsafe to proceed to sea, or an unreasonable risk to the environment, should be handled by requiring corrective measures to be accomplished within a specified time frame or prior to returning to the U.S. If time permits, assist in correcting simple problems (such as transfer

procedures or maneuvering information) while on scene. Give the master (or mate) sufficient guidance to correct any outstanding problems. Provide the master a written record of the boarding that includes a listing of all discrepancies and the corrective actions required. If the vessel is detained, provide the master with a copy of the Detention Report (MSM II-D2, Annex A). The Detention Report should list only those deficiencies that must be corrected prior to departure.

G. POST-BOARDING ACTIONS

As you depart the vessel, watch for any signs of pollution around the vessel and the facility (or other vessels) and any other unsafe situations. A brief monitor of the shoreside part of the operation should also be conducted before leaving the area for your next assignment or returning to the unit. After arriving at the unit, enter all information into the MSIS, including vessel file updates, boarding report (PSAR), discrepancy reports, and operational controls. For the benefit of other MSO's, enter case information as soon as possible after return to the unit. In all cases, MSIS should be updated within 48 hours of completing the boarding. If the vessel is detained, follow the procedures in Chapter 24 of this volume for documenting the detention.

1. Marine Safety Information System (MSIS)

All cargo vessel examinations will be documented in MSIS by filing a Port Safety Activity Report (PSAR). To ensure the accuracy of the database used in making boarding decisions:

a. The code "AEF" will be used to document all annual freight vessel examinations.

b. The code "DOCK" will be used to document all freight vessel reexaminations. This code will only be used when a physical boarding is performed. (Those units that update document data based on electronically provided information may use the code "INV NEC" when filling a PSAR to record that activity.)

c. The codes "PHM" (Monitor Packaged Hazardous Material), "MSD" (Monitor Ship Dangerous Cargo), "MSO" (Monitor Ship Oil) or ""MBL" (Monitor Blasting Agent/Oxidizer) will be used to document all freight vessel monitors as applicable. These codes will NOT be used alone, but should be used in conjunction with either the "AEF" or "DOCK" codes.

d. The codes "CSC" (Commercial Explosives), "CSM" (Military Explosives) or "CSR" (Radioactive) will be used to document all freight vessel cargo supervisions as applicable. These codes will NOT be used alone, but should be used in conjunction with either the "AEF" or "DOCK" codes.

e. The code "MAR" (MARPOL General) shall be included as an activity type on all boardings. Estimate the time spent by the boarding office checking MARPOL related items and enter it under the "ACTIVITY" column after

"MARPOL GEN". Do not include marine inspector time.

f. Until a change can be made to the PSAR, the "PERS" column will be used to record the number of "ACTIVITY" work hours spent by marine inspectors on foreign freight vessels. All work hours will be rounded to the nearest tenth of an hour with the exception of marine inspector "ACTIVITY" hours, which will be rounded to the nearest hour. Marine inspector preparatory time, travel time, administrative time and time on board should be included under the "PERS" column.

g. No distinction needs to be made between marine inspector and port safety boarding officer training hours. These hours will be combined under the applicable "TRAINING" column.

h. The certificate codes "NON" (none) will be used for all freight vessel annual examinations and reexaminations.

i. Outstanding discrepancies and any significant discrepancies corrected during the boarding must be entered in the Port Safety Discrepancy Report (PSDR) product set.

j. Update the Vessel File Involved Party (VFIP) product set if different from that observed aboard the vessel. If a vessel's classification society is not listed or differs from that shown in VFIP, enter the appropriate classification society using the Involved Party Numbers (IPN) listed in MSM II-D4.B.3. The "OWNER" indicated in the VFIP should match that indicated on the vessel's registry. The "OPERATOR" indicated in the VFIP should match that indicated on the vessel's Certificate of Financial Responsibility (COFR). If the vessel is ISM certified ensure that the Document of Compliance company name is entered as owner or operator.

k. The Vessel File List of Documents (VFLD) product set should be updated to reflect the status of the vessel's documents.

l. MSIS entries including deficiencies are to be entered into MSIS within 48 hours of completing a boarding.

m. If a vessel is expected to arrive within another OCMI/COTP's zone of responsibility before MSIS can be updated, information regarding the boarding and any deficiencies or control action taken shall be relayed to the next port of call in the most expedient means available, (e.g. facsimile, telephone, E-mail etc.).

Figure D5-1 is an example of a completed PSAR for an annual freight vessel examination including a monitor conducted by a qualified marine inspector, boarding officer and a marine inspector (or boarding officer) trainee completed in 4 hours.

FIGURE D5-1

PSAR PORT SAFETY ACTIVITY REPORT 02JAN98

CASE NUMBER/ PS95000002 PORT/ G-MOC ACTIVITY DATE/ 01JAN98 REF CASE/

CARGO: NAME/ CONTAINERS TYPE/ NON HAZARDOUS MATERIAL.
OPERATION / OFFLOADING NEC DESC/ _____.
LOCATION / CITY, STATE _____.
_____.
BOARD TIME / 0830 HIGH PRIORITY?/ Y TEAM LEADER INITS/ JJS
CERT ACTION/ NONE VALIDATE/ X CLOSE TO FILE/ .
COMMENTS / COMPETED ANNUAL FREIGHT SHIP EXAMINATION.
_____
_____
_____
_____

SEL ---ACTIONS REPORTED ---
1 NUMBER OF DISCREPENCIES……. / __ OUT?/ N LEGAL ACTIONS?/N
2 VPI NOTICE……. /
3 OPERATIONAL CONTROL IMPOSED……/
4 NARRATIVE SUPPLEMENT……... /
5 NUMBER OF DEFICIENCY SUMMARIES /

VESSELS INVOLVED:
V/K VIN NAME FLAG SERVICE
V L7117117 RUSTY BUCKET MT FREIGHT SHIP .
#DIS/ _ OUT?/ _ LEG.ACT?/ _ LPC/ HONDO NPC/ HOUMS
ACTIVITY TYPE(S)/ ANNUAL SHIP MON PH HAZMAT MARPOL GEN _____.
_____ _____ _____ _____.

----------TOTAL TIME SPENT PER ACTIVITY----------
------REGULAR------- -------RESERVE--------

SUBJ	ACTIVITY TYPE	ACTIVITY	TRAIN	PERS	ACTIVITY	TRAIN	PERS	BOAT	AIRCRAFT
VI	ANNUAL SHIP	2.0	3.0	7					.
VI	MON PH HAZMAT	1.0							.
VI	MARPOL GEN	1.0	1.0	1					.
__									.
__									.

ADMIN/ 3.0 ADMIN/ _____
TRAV/ 4.0 TRAV/ _____